BNL BERYLLIUM USE REVIEW FORM (BeO)

CURRENT: OPERATIONS CURRENTLY BEING DONE)
Complete a separate questionnaire for each beryllium operation.

Department	(machine shop, accelerator, experiment, laboratory) National Synchrotron Light Source (Accelerator)
Use of Beryllium	(detector window, beam pipe, reaction product, stock) Beryllium Oxide (BeO), Beryllia Insulators, beam filtering windows, shims
Describe Use or Process	Only handled as an ARTICLE
Description of Operation/Handling Procedure:	1. At 14 locations around X-ray ring, BeO discs 5mm thick x ~1" diam. Act as filtering windows @ hard X-ray monitoring ports (in vacuum). 2. Beam position monitors located at the U14, X1, X12 and X13 beamlines have BeO shims (8/monitor) for electrical isolation and thermal conductivity (in vacuum). 3. Items above manufactured by Acuratus in New Jersey. 4. RF cavities have ceramic insulators made of BeO. 5. Note: I was informed that transistors may have BeO insulators. These would be everywhere at BNL.
Physical State of Be Amount Used	Solid (sheet) Oxide N.A.
Building: 725	Room: X-ray and VUV experimental floors. Inside X-ray and VUV rings Room 2-190A (storage) Near RF test cave in cabinet
Frequency of Use	In continuous use
Engineering Controls:	No machining
Personal Protective Equipment	Gloves: Impervious Clothing: Lab Coat (sometimes) Respirator: None Frequency: Occasional
Users (with life number or job title)	Name & Status (Current) *Current techs and scientists:* Erik Johnson, Tony Lenhard, Gerry Van Derlaske, Rick Greene, Rich Freudenberg, Jim Newburgh
Emergency Response Scenario [Describe likely event(s)]	Material could crack into small pieces.
Written Documentation and Emergency Response	NSLS PRM 6.3.0 "Beryllium Management" outlines the NSLS beryllium program, including: ▪ Responsibilities ▪ Work Control Requirements Storage and Handling Damaged Articles Oxidized Articles ▪ Training ▪ Wastes BNL Industrial Health staff is contacted to conduct surface and air monitoring as necessary. Guidance is also provided to staff in NSLS ESH Highlight No. 16 "Beryllium - Know What You have and Take Care Of It" as well as in the Facility Specific Safety Orientation training module ("Beryllium").

Pollution Prevention Plan	N.A. No machining.
End of Project Plan	End-of-Project Plan would involve dealing with any remaining beryllium as a waste as described in NSLS PRM 6.3.0.

Person Completing the Questionnaire

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